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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,516	02/15/2001	Toshihiro Sugiura	ADACHI P202US	3294
20210	7590	08/03/2004	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151			CHO, HONG SOL	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/784,516	SUGIURA, TOSHIHIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hong Cho	2662	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02-15-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 3, the phrase "both higher and lower frequency bands than a frequency band" renders the claim indefinite. The range of frequency bands set for transmitting upward signal is not clearly described in regard to a frequency band for transmitting downward signal.  
  
See MPEP § 2173.05(d).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchi et al (U.S 6587479), hereinafter referred to as Bianchi, in view of Grobicki et al (U.S 5471474), hereinafter referred to as Grobicki.

Re claim 1, Bianchi discloses a cable access point (CAP) associated with wireless LAN system in figure 2. The CAP includes 802.11 access point and cable modem. The PC (*wireless terminal*) fitted with wireless adapter transmits and receives wireless LAN signals to and from 802.11 access point (column 5, lines 6-12). Bianchi discloses wireless LAN transmitting signals at 2.4GHz (*transmission frequency band of wireless access section*) (column 7, lines 14-29). Bianchi does not teach a wireless connection between head end (*a center equipment*) of the bi-directional CATV system and CAP (*access point*). However, in order to service large geographic area covered by a CATV system, the head end can use both wireless and wired connections to access points. Grobicki discloses a network system where head end CATV system in figure1 is connected to distribution system (*access point*) or remote head ends by wireless (figure1, element 111). In view of this, having the teaching of Grobicki and then given system of Bianchi, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement wireless system of Grobicki between head end CATV system and access point. The motivation to combine is to get the benefit taught by Grobicki since Grobicki states that wireless connection is used to cover very large service area for CATV system (column 2, lines 46-48). The different transmission frequency bands used for wireless transmission section and wireless access section are not disclosed in Bianchi and Grobicki' system. **Official Notice is taken that** it is expected in the

art that the radio signals are transmitted at a certain transmission frequency band and Bianchi discloses a RF translator (figure 7, element 38-3) that can be set to translate RF signals compatible with the wireless transmission frequency band (column 7, lines 13-19). It is also well known in wireless communications that a proper frequency assignment that does not interfere with each other is considered in designing RF systems. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the function of setting frequency band into Grobicki's system. The motivation to combine is to avoid frequency interferences by using different frequency bands for each transmission in wireless communications.

Re claim 2, it is well known in wireless communications that branching devices such as amplifiers, splitters, and tap-offs are used for relay RF signals or to provide extended access service.

Re claim 3, Bianchi does not disclose frequency band used for a wireless communication between center equipment and terminal. However, Bianchi discloses a function of RF translator that can be used to set frequency band for transmitting upward and downward signals in Grobicki's wireless system. In view of this, having the teaching of Bianchi and given system of Grobicki, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the function of setting frequency band into Grobicki's system. The motivation to combine is to get the benefit taught by Bianchi since

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Bianchi states that wireless LAN minimizes the need for hard-wired connections (column 1, lines 35-37).

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent (5878277) to Ohta discloses communication system having a central station and terminal stations

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 703-305-0343. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hong Cho

  
RICKY NGO  
PRIMARY EXAMINER